

FY2016

FORT LEE

Army Defense Environmental Restoration Program

Installation Action Plan

Printed 06 October 2016

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Fort Lee, the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is; therefore, subject to change.

Acronyms

AEDB-CC	Army Environmental Database - Compliance-related Cleanup
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
AST	Aboveground Storage Tank
BNA	Base/Neutral Acid
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
BTV	Background Threshold Values
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMI(C)	Corrective Measures Implementation (Construction)
CR	Compliance Restoration
CS	Confirmation Sampling
CTT	Closed, Transferred, or Transferring
DD	Decision Document
DMM	Discarded Military Munition
DoD	Department of Defense
DR	Detonation Range
ECC	Environmental Consultants and Contractors
FCI-P	Federal Reformatory - Petersburg
FRA	Final Remedial Action
FS	Feasibility Study
FTLE	AEDB-R abbreviation for Fort Lee
FY	Fiscal Year
GCMB	Golf Course Maintenance Building
HRR	Historical Records Review
HRS	Hazard Ranking Score
IA	Installation Assessment
IAP	Installation Action Plan
IMCOM	Installation Management Command
INV	Investigation
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ISC	Initial Site Characterization
LTM	Long-Term Management
LUC	Land Use Control
MC	Munitions Constituent
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
MRS-PP	Munitions Response Site Prioritization Protocol
N/A	Not Applicable
NFA	No Further Action
PA	Preliminary Assessment
PBA	Performance-Based Acquisition
PBC	Performance-Based Contract
PCB	Polychlorinated Biphenyls

Acronyms

PM	Pesticide Mixing
PP	Proposed Plan
ppm	parts per million
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RI	Remedial Investigation
RIP	Remedy-in-Place
RL	Road Landfill
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
STP	Sewage Treatment Plant
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TOX	Total Organic Halogen
TPH	Total Petroleum Hydrocarbon
TRADOC	US Army Training and Doctrine Command
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VA	Virginia
VDEQ	Virginia Department of Environmental Quality
VOC	Volatile Organic Compound

Acronym Translation Table

CERCLA

Preliminary Assessment(PA)
Site Inspection(SI)
Remedial Investigation/Feasibility Study(RI/FS)
Remedial Design(RD)
Remedial Action (Construction)(RA(C))
Remedial Action (Operation)(RA(O))
Long Term Management(LTM)
Interim Remedial Action(IRA)

RCRA

= RCRA Facility Assessment(RFA)
= Confirmation Sampling(CS)
= RCRA Facility Investigation/Corrective Measures Study(RFI/CMS)
= Design(DES)
= Corrective Measures Implementation (Construction)(CMI(C))
= Corrective Measures Implementation (Operation)(CMI(O))
= Long Term Management(LTM)
= Interim Measure(IM)

Site Alias List

AEDB-R Site ID to Alias List

AEDB-R #	Alias
CCFTLE-33	RL Site
CCFTLE-34	GCMB Site
FTLE-001-R-01	
FTLE-002-R-02	
FTLE-005-R-01	
FTLE-05	PM Site
FTLE-06	WWTP Site
FTLE-11	LF 14
FTLE-15	LF 15
FTLE-16	LF 16
FTLE-17	FTLE-17
FTLE-19	LF 10
FTLE-24	MB Site
FTLE-31	FTP Site

Installation Information

Installation Locale

Installation Size (Acreage): 5900

City: South of the city of Hopewell and northeast of the city of Petersburg

County: Prince George

State: Virginia

Other Locale Information

Fort Lee is currently the home of the Sustainment Center of Excellence, a major subordinate command of the Army Training and Doctrine Command (TRADOC), and is home to the Transportation Center and School, the Ordnance Center and School, the Ordnance Munitions and Electronics Maintenance School, the Army Logistics University, Transportation Management Training, the Defense Commissary Agency, the Defense Contract Management Agency, and Culinary Training. Fort Lee is located in Prince George County, Virginia (VA), south of the city of Hopewell and northeast of the city of Petersburg. The total area encompassed by Fort Lee is 5,900 acres; half of this area has been developed and the remaining half is forested. Based upon the 2010 census, Petersburg had a population of 33,740; Hopewell had a population of 22,534 and Colonial Heights (located adjacent and to the north of Petersburg) had a population of 16,900. In 2010, Prince George County had a population of 33,047.

Installation Mission

The mission of Fort Lee is to:

- assist the TRADOC commander with combat and training developments;
- command, operate and administer the use of resources to accomplish assigned missions;
- exercise command authority over the US Army Garrison, Fort Lee; and
- provide base operations support to tenant and satellite units and activities, organizations, units, and personnel of other military departments and commands as required.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

Investigation/design phase executing agency: US Army Corps of Engineers (USACE), Baltimore District

RA phase executing agency: USACE, Baltimore District

Regulator Participation

State Virginia Department of Environmental Quality (VDEQ)

National Priorities List (NPL) Status

FORT LEE is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

The community has expressed no sufficient, sustained interest in a RAB.

Installation Information

Installation Program Summaries

IRP

Primary Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Affected Media of Concern: Groundwater, Soil

MMRP

Primary Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Affected Media of Concern: Groundwater, Soil

CR

Primary Contaminants of Concern: Metals, Volatiles (VOC)

Affected Media of Concern: Groundwater

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Planned	201712	201712	2018

5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
Decision Document for FTLE-24	FTLE-24

Cleanup Program Summary

Installation Historic Activity

Camp Lee was activated in 1917 and served as a state mobilization and training center during World War I. Immediately after the war, Camp Lee was used for demobilization and deactivated at the end of 1919. After deactivation it became a wildlife preserve until 1940. It was reactivated in 1941 as a quartermaster training center and school. In 1950, it received permanent status and was named Fort Lee. During the 1950s, permanent facilities were added and airborne logistics training and petroleum training commenced. During reorganization of the US Army in 1962, Fort Lee was designated a Class 1 military installation under the Second United States Army and was renamed the US Army Quartermaster Center and Fort Lee.

In 1966, the Second United States Army was inactivated and Fort Lee became a Class 1 military installation under the First United States Army. In 1973, Fort Lee became a major Army Subcommand under the control of TRADOC. In 1988, the US Army Quartermaster Center and Fort Lee was redesignated the US Army Logistics Center (Provisional) and Fort Lee. During the 1990 reorganization of TRADOC, Combined Arms Support Command and Fort Lee were established from the merger of combat development and training development.

Fort Lee is regulated by both the US Environmental Protection Agency (USEPA) Region III and the VDEQ. Currently, investigations at Fort Lee are being funded under the Installation Restoration Program (IRP) to ensure compliance with the requirements of federal and state environmental regulations. In September 1997, the USEPA proposed listing Fort Lee on the National Priorities List (NPL) and began the formal calculation of a hazard ranking score (HRS). As of February 2008, the USEPA Region III did not appear to be actively pursuing NPL listing of Fort Lee.

In April 1982, an installation assessment (IA) was completed. The assessment included inspection of motor pools, laboratories, photo, medical, and fuels laboratories, and pesticide storage and mixing areas. The IA provided a summary of AOC but did not identify a comprehensive list of sites needing investigation.

Fort Lee does not have an interagency agreement or a Technical Review Committee (TRC). Fort Lee's Resource Conservation and Recovery Act (RCRA) permit was revised in 1992 because it became a large quantity waste generator. Fort Lee does not have a RCRA Part B permit.

In January 2007, a performance-based acquisition (PBA) was issued to Environmental Consultants and Contractors (ECC), Inc. for five sites at Fort Lee (FTLE-05, FTLE-16, FTLE-24, FTLE-31, and FTLE-32). In August 2008 FTLE-06 was added to the PBA. FTLE-05, FTLE-06, FTLE-24 and FTLE-31 were funded through remedy-in-place (RIP) and long-term management (LTM); however, FTLE-16 and FTLE-32 were funded only through the decision document (DD). Additional funding for LTM at FTLE-16 is required. In December 2007, in situ chemical oxidation injections were completed at FTLE-05 and FTLE-24. This was followed by an in situ chemical oxidation injection at FTLE-06 in June 2009. In December 2007, field work for the remedial investigation (RI) was also completed for FTLE-16, FTLE-31, and FTLE-32. No further action (NFA) was recommended for FTLE-32.

In 2008, the site inspections were finalized for all of Fort Lee's Military Munitions Response Program (MMRP) sites. RIs were recommended for three sites (FTLE-001-R-01, FTLE-002-R-01, and FTLE-005-R-01). An RI was completed for FTLE-002-R-01 in 2011 and recommended NFA. The RI for FTLE-005-R-01 was completed in 2011 and recommended a feasibility study (FS)/proposed plan (PP)/DD using existing land use controls (LUC) to achieve response complete (RC) in 2014. The FS was completed in 2013. The RI for FTLE-001-R-001 is underway and is scheduled for completion in 2016. During fieldwork for the RI at FTLE-002-R-01 in 2010, a previously unknown 2.36-inch rocket impact area was discovered. Estimated to be 30 acres, a new site was created (FTLE-002-R-02) to track the rocket range. An SI was completed in 2014.

Installation Program Cleanup Progress

IRP

- Prior Year Progress:** The Draft RI at FTLE-001-R-01 was completed and is in review at the VA DEQ. The Draft RI concluded that a remedial action would not be required. Chemical Oxidation reinjections were performed at FTLE-05, FTLE-06, and FTLE-24 to eliminate potential rebound at these sites. RIs at CCFTLE-34 and FTLE-002-R-02 were funded and are just getting underway.
- Future Plan of Action:** Complete all investigatory work. Continue to pursue opportunities to reduce the scope and frequency of groundwater monitoring at all sites.

Cleanup Program Summary

MMRP

Prior Year Progress: The Draft RI at FTLE-001-R-01 was completed and is in review at the VA DEQ. The Draft RI concluded that a remedial action would not be required. A contract to complete the RI at FTLE-002-R-02 was awarded and is just getting underway.

Future Plan of Action: Complete the RI for FTLE-002-R-02. Finalize the RI for FTLE-001-R-01.

CR

Prior Year Progress: Continued groundwater monitoring at CCFTLE-33. Awarded the contract for the RI at CCFTLE-34.

Future Plan of Action: Continue to pursue opportunities to reduce the scope and frequency of groundwater monitoring at CCFTLE-33. Complete the RI at CCFTLE-34

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Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 33/24

Installation Site Types with Future and/or Underway Phases

2	Disposal Pit/Dry Well (FTLE-05, FTLE-24)
1	Fire/Crash Training Area (FTLE-31)
5	Landfill (FTLE-11, FTLE-15, FTLE-16, FTLE-17, FTLE-19)
1	Waste Treatment Plant (FTLE-06)

Most Widespread Contaminants of Concern

Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern

Groundwater, Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FTLE-07	PETROLEUM TRAINING FACILITY	FRA	NATURAL ATTENUATION	1998
FTLE-17	Closed Landfill Nos.4, 5 and 6	IRA	DRAINAGE CONTROLS	2000
FTLE-05	Pesticide Mixing Area	IRA	DRAINAGE CONTROLS	2001
FTLE-05	Pesticide Mixing Area	IRA	REMOVAL	2001
FTLE-11	Closed Landfill No. 14	FRA	CAPPING	2001
FTLE-15	Closed Landfill No.7	IRA	CAPPING	2001
FTLE-15	Closed Landfill No.7	FRA	INSTITUTIONAL CONTROLS	2001
FTLE-27	OPEN DETONATION RANGE	FRA	INSTITUTIONAL CONTROLS	2001
FTLE-27	OPEN DETONATION RANGE	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2001
FTLE-18	REFORMATORY ROAD LANDFILL	FRA	DRAINAGE CONTROLS	2005
FTLE-18	REFORMATORY ROAD LANDFILL	FRA	CAPPING	2005
FTLE-18	REFORMATORY ROAD LANDFILL	FRA	INSTITUTIONAL CONTROLS	2005
FTLE-19	Landfill No.10	FRA	CAPPING	2007
FTLE-19	Landfill No.10	FRA	INSTITUTIONAL CONTROLS	2007
FTLE-19	Landfill No.10	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2007
FTLE-05	Pesticide Mixing Area	FRA	CHEMICAL REDUCTION/OXIDATION	2008
FTLE-24	Maintenance Bldgs. No.6241 AND 6243	FRA	CHEMICAL REDUCTION/OXIDATION	2008
FTLE-06	Buried Sewage Treatment Plant	FRA	INSTITUTIONAL CONTROLS	2009
FTLE-06	Buried Sewage Treatment Plant	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2009
FTLE-16	Closed Landfill No.8	FRA	INSTITUTIONAL CONTROLS	2009
FTLE-31	Fire Training Pit	FRA	WASTE REMOVAL - SOILS	2009
FTLE-31	Fire Training Pit	FRA	INSTITUTIONAL CONTROLS	2009
PBC @ Ft Lee	PBC	FRA	OTHER	2009

IRP Summary

Duration of IRP

Date of IRP Inception: 198111

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 200909/200909

Date of IRP completion including Long Term Management (LTM): 201810

IRP Contamination Assessment

Contamination Assessment Overview

In September 1997, the USEPA, in a letter to the VDEQ, proposed that Fort Lee be placed on the NPL and began the formal HRS process. Subsequent contact with the USEPA indicated that the preliminary assessment (PA) package they were using to support HRS scoring had been prepared in 1992 and that it contained many errors. These errors made the situation at Fort Lee appear much worse than it really was. In November 1997, Fort Lee and TRADOC personnel met with the USEPA Region III in Philadelphia to discuss the HRS process and to make sure that the USEPA was using the latest data from the IRP. Copies of the latest available reports were given to the USEPA to support the HRS scoring process, with other reports following as they were completed. In November 1998, the USEPA Region III and VDEQ met at Fort Lee to discuss the status of the HRS scoring and to review the status of Fort Lee's IRP. At that time, the USEPA could not say when the HRS scoring would be completed; however, the USEPA was impressed with the scope of Fort Lee's IRP and agreed that placing Fort Lee on the NPL would not speed up Fort Lee's cleanup efforts. The VDEQ concurred with this statement. The USEPA also stated that there was a possibility that even if Fort Lee scored above the threshold for NPL listing, they might recommend that Fort Lee be given status as a non-NPL federal facility with a federal facilities agreement. As of June 2014, the USEPA Region III has neither completed HRS scoring nor made any recommendations about Fort Lee's status. According to the VDEQ, the USEPA appears satisfied with Fort Lee's progress and will not proceed with placement on the NPL unless the VDEQ decides that it is necessary to ensure cleanup.

DDs for FTLE-05, FTLE-06, FTLE-11, FTLE-15, FTLE-16, FTLE-17, FTLE-19, FTLE-24, FTLE-31, CCFTLE-33 are in review at the VDEQ. A five-year duration, 10-site PBA LTM contract was awarded in 2013 and is underway.

Cleanup Exit Strategy

Adherence to the site-specific cleanup strategies and schedules set forth in the IAP will ensure a successful and timely completion of the IRP at Fort Lee.

IRP Previous Studies

Year	Title	Author	Date
1982	Installation Assessment of the US Army Quartermaster Center and Fort Lee, VA	Environmental Science and Engineering Inc., Gainesville, FL	APR-1982
1987	Environmental Baseline Survey: Fort Lee	Versar, Inc., Springfield, VA	JUN-1987
	Environmental Operations Review No. 43--21-1372-88, US Army Quartermaster Center	US Army Environmental Hygiene Agency, Aberdeen, MD	NOV-1987
1989	Soil Gas Survey Report Petroleum Training Facility	Target Environmental Services, Inc.	NOV-1989
	Geohydrologic Study No. 38-26-K913-90	Fort Lee	DEC-1989
1990	Preliminary Investigation Report Petroleum Training Facility	US Geological Survey	OCT-1990
1991	Schuylkill Landfill SI	James M. Montgomery Consulting Engineers, Inc.	SEP-1991
1992	Site Characterization Report Petroleum Training Facility	James M. Montgomery Consulting Engineers, Inc.	MAR-1992
	Schuylkill Landfill SI Report	James M. Montgomery Consulting Engineers, Inc.	NOV-1992
	PA/SI Report for Eight Sites	James M. Montgomery Consulting Engineers, Inc.	DEC-1992
1993	Schuylkill Landfill Closure Plan	KCI Technologies, Inc., Baltimore, MD	APR-1993
1994	Final Annual Sampling Report Petroleum Training Facility, Ft. Lee, VA	Montgomery Watson Consulting Engineers, Inc., Herndon, VA	JUN-1994
	Final Report: Evaluation of Monitoring Well MW2742	Montgomery Watson Consulting	DEC-1994
1995	Final Annual Sampling Report, 1995, Petroleum Training Facility, Ft. Lee, VA	The Information Broker, Inc., Saluda, VA	JUL-1995
	Confirmation Sampling Report, Landfill 10 Site	Fluor Daniel, Inc. Greenville, SC	NOV-1995
	Confirmation Sampling Report, Open Detonation Range	Fluor Daniel, Inc. Greenville, SC	NOV-1995
	Confirmation Sampling Report, Outdoor Recreation Area	Fluor Daniel, Inc. Greenville, SC	NOV-1995
	Confirmation Sampling Report, Inactive Fire Training Site	Fluor Daniel, Inc. Greenville, SC	NOV-1995
1996	Confirmation Sampling Report, Inactive Fire Training Site	Fluor Daniel, Inc. Greenville, SC	AUG-1996
	Confirmation Sampling Report, Open Detonation Range	Fluor Daniel, Inc. Greenville, SC	AUG-1996

IRP Previous Studies

Year	Title	Author	Date
1996	Confirmation Sampling Report, Outdoor Recreation Area	Fluor Daniel, Inc. Greenville, SC	AUG-1996
	Confirmation Sampling Report, Landfill 10	Fluor Daniel, Inc. Greenville, SC	AUG-1996
1997	Final PA/SI for Six Sites at Fort Lee, VA	Fluor Daniel, Inc. Greenville, SC	MAY-1997
1998	Final Analytical Results Report for Landfill 14 SI and Confirmatory	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Analytical Results Report for the Former Petroleum Training Facility and Landfill	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Analytical Results Report for the Environmental Baseline Survey for Bailey	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Sampling and Analysis Plan for RI for Landfill 10	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Quality Assurance project Plan for Landfill 10	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Baseline Environmental Survey - Bailey Creek	Fluor Daniel, Inc. Greenville, SC	FEB-1998
	Final Workplan - PM Site Phase III	Fluor Daniel, Inc. Greenville, SC	OCT-1998
	Final Sampling and Analysis Plan for the Former Pesticide Mixing Area Site	Fluor Daniel, Inc. Greenville, SC	NOV-1998
	Final QA Project Plan for the Former PM Site, Phase III	Fluor Daniel, Inc. Greenville, SC	NOV-1998
	Interim Final Confirmation Sampling Report for Landfill 16	Fluor Daniel, Inc. Greenville, SC	DEC-1998
1999	Final RI Report - Former Wastewater Treatment Facility	Fluor Daniel, Inc. Greenville, SC	JAN-1999
	Final Surface Soils Background Metals and Anthropogenic Pesticides Report	Fluor Daniel, Inc. Greenville, SC	JAN-1999
	Final Confirmation Sampling Report - Landfill 15	Fluor Daniel, Inc. Greenville, SC	MAR-1999
	Final Confirmation Sampling Report - Landfill 16	Fluor Daniel, Inc. Greenville, SC	MAR-1999
	Final RI Report for Landfill 10 Site	Fluor Daniel, Inc. Greenville, SC	MAR-1999
	Interim Final SI for Landfill 14	Fluor Daniel, Inc. Greenville, SC	APR-1999
	Final Closeout Report for the Inactive Fire Training Area	Fluor Daniel, Inc. Greenville, SC	APR-1999
	Final Analytical Results Report for the Former Pesticide Mixing Area	Fluor Daniel, Inc. Greenville, SC	MAY-1999
	Final FS Report for the Former Wastewater Treatment Facility	Fluor Daniel, Inc. Greenville, SC	SEP-1999
2000	Final FS for Landfill 10 Site	IT Corp., Greenville, SC	JAN-2000
	Final RI Report for the Former Pesticide Mixing Area Site	IT Corp., Greenville, SC	JUL-2000
	Final Interim Action Plan for the Reformatory Road Landfill Site	IT Corp., Greenville, SC	AUG-2000

IRP Previous Studies

2000	Title	Author	Date
	Site Health and Safety Plan for the Reformatory Road Landfill	IT Corp., Greenville, SC	AUG-2000
	Letter Report for Landfill 14 Boundary Determination	IT Corp., Greenville, SC	AUG-2000
	Site Safety and Health Plan for Landfill 14	IT Corp., Greenville, SC	SEP-2000
	Site Safety and Health Plan for Landfill 15, IT Corp	IT Corp., Greenville, SC	SEP-2000
	Final Proposed Plan for RA - Former Wastewater Treatment Facility	IT Corp., Greenville, SC	SEP-2000
2001	WT Site - Landfill Cover Study	IT Corp., Greenville, SC	MAR-2001
	Interim Action Plan for the Reformatory Road Landfill Site	IT Corp., Greenville, SC	MAR-2001
	Outdoor Recreation Area Site, Final RI Work Plan	Malcolm Pirnie, Inc., Newport News, VA.	MAR-2001
	Interim Removal Action Plan for the Former Pesticide Mixing Area	IT Corp., Greenville, SC	APR-2001
	Site Safety and Health Plan for the Former Pesticide Mixing Area	IT Corp., Greenville, SC	APR-2001
	Final Outdoor Recreation Area Work Plan	IT Corp., Greenville, SC	APR-2001
	Interim Action Completion Report - Landfill 15 Site	IT Corp., Greenville, SC	MAY-2001
	Final Confirmatory Sampling Report - PT Site	IT Corp., Greenville, SC	MAY-2001
	Interim Action Completion Report - Landfill 14 Site	IT Corp., Greenville, SC	MAY-2001
	Final Outdoor Recreation Area Work Plan Addendum	Malcolm Pirnie, Inc., Newport News, VA.	DEC-2001
2002	Technical Memorandum: PA for the Former Fire Station	Shaw Group, Greenville, SC	JAN-2002
	Final RI Report Work Plan Addendum	Malcolm Pirnie, Inc., Newport News, VA.	JAN-2002
	Final Interim Action Completion Report - Landfill 15	Shaw Group	APR-2002
	Final Interim Action Completion Report - Landfill 14	Shaw Group	APR-2002
	Final FS Report for Landfill 10	Shaw Group	APR-2002
	Interim Removal Action Completion Report for the Former PM Site Ditch	Shaw Group	JUN-2002
	Closeout Report for Well Abandonment at the Military-in-the-Field Training Facility and the Former Petroleum Training Facility	Shaw Group	JUN-2002
	Site Safety and Health Plan for the Former Fire Station PA/SI	Shaw Group	JUN-2002
	Final Work Plan, Field Sampling Plan and Quality Assurance Project Plan for the Former Fire Station PA/SI	Shaw Group	JUN-2002
	Final Groundwater Monitoring and Site Inspection Plan for Landfill 14	Shaw Group	AUG-2002
	Site Safety and Health Plan for Landfill 14, Landfill 15, and Open Detonation Range Sites	Shaw Group	SEP-2002
	Interim Action Plan - Landfill 15 - Addendum 1	Shaw Group	OCT-2002

IRP Previous Studies

2002	Title	Author	Date
	Remedial Design Report - Reformatory Road Landfill	Shaw Group	NOV-2002
	Technical Memorandum - Field Assessment for the Former UST Site	Shaw Group	NOV-2002
	Outdoor Recreation Area Final RI Report	Malcolm Pirnie, Inc., Newport News, VA.	DEC-2002
2003	USAEC DD for the Reformatory Road Landfill Site	Shaw Group	JAN-2003
	Long-Term Monitoring for Landfill 15 (L5 Site), Quarter 01, 2003	Shaw Group	APR-2003
	Long-Term Monitoring for Landfill 14 (L4 Site), Quarter 01, 2003	Shaw Group	APR-2003
	Long-Term Monitoring for Open Detonation Range (DR Site), Quarter 01, 2003	Shaw Group	APR-2003
2004	Final QCS/AR Report	Malcolm Pirnie, Inc.	JAN-2004
	Final RI and QCS/AR Reports, for the Outdoor Recreation Area	Malcolm Pirnie, Inc.	JAN-2004
	Long-Term Monitoring Report for 4th Quarter 2003 for the Open Detonation Range (DR Site)	Shaw Group	JAN-2004
	Long-Term Monitoring Report for 4th Quarter 2003 for Landfill 14 (L4 Site)	Shaw Group	JAN-2004
	Long-Term Monitoring Report for 4th Quarter 2003 for Landfill 15 (L5 Site)	Shaw Group	JAN-2004
	Monitoring Well Evaluation & Sampling Results, Maintenance Building (MB Site)	Shaw Group	FEB-2004
	Final PA/SI for the Former Fire Station (FS Site)	Shaw Group	MAR-2004
	Outdoor Recreation Area Preliminary Draft FS Report	Malcolm Pirnie, Inc.	APR-2004
	Final Remedial Design Report for Landfill 10 (LF Site), Corrected pages only	Shaw Group	MAY-2004
	Long-Term Monitoring Report for 5th Quarter 2004 for Landfill 14 (L4 Site)	Shaw Group	MAY-2004
	Long-Term Monitoring Report for 5th Quarter 2004 for Landfill 15 (L5 Site)	Shaw Group	MAY-2004
	Long-Term Monitoring Report for 5th Quarter 2004 for the Open Detonation Range (DR Site)	Shaw Group	MAY-2004
	Interim Action Completion Report 2 Landfill 15 (L5 Site) Addendum Number 1	Shaw Group	JUN-2004
	Final Remedial Design Report for the Former Wastewater Treatment Facility (WT Site)	Shaw Group	JUL-2004
	Long-Term Monitoring Report for 6th Quarter 2004 for Landfill 14 (L4 Site)	Shaw Group	JUL-2004
	Long-Term Monitoring Report for 6th Quarter 2004 for Landfill 15 (L5 Site)	Shaw Group	JUL-2004
	Long-Term Monitoring Report for 6th Quarter 2004 for the Open Detonation Range (DR Site)	Shaw Group	JUL-2004
	Long-Term Monitoring Report for 7th Quarter 2004 for Landfill 14 (L4 Site)	Shaw Group	OCT-2004
	Long-Term Monitoring Report for 7th Quarter 2004 for Landfill 15 (L5 Site)	Shaw Group	OCT-2004
	Long-Term Monitoring Report for 7th Quarter 2004 for the Open Detonation Range (DR Site)	Shaw Group	OCT-2004

IRP Previous Studies

2004	Title	Author	Date
	Long-Term Monitoring Report - Revised 6th Quarter 2004 Data for Landfill 14 (L4 Site)	Shaw Group	OCT-2004
	Long-Term Monitoring Report - Revised 6th Quarter 2004 Data for Landfill 15 (L5 Site)	Shaw Group	OCT-2004
	Site Safety and Health Plan for Long-Term Monitoring Well Evaluation at Maintenance Building (MB Site)	Shaw Group	DEC-2004
2005			
	Response to Comments for the Draft Outdoor Recreation Area FS Report	Malcolm Pirnie, Inc.	MAR-2005
	Final Human Health Risk Assessment Workplan for the Former Pesticide Mixing Area (PM Site)	Shaw Group	APR-2005
	Landfill 10 Contractor's Quality Control Plan	EM Federal Corp.	NOV-2005
	Comments on EM Federal Workplan for the Landfill 10 Site	Malcolm Pirnie, Inc.	NOV-2005
	Landfill 10 RA Plan	EM Federal Corp.	NOV-2005
	Landfill 10 Site Specific Pollution Prevention Plan, Operations & Maintenance Manual, and Spill Prevention Controls & Countermeasures	EM Federal Corp.	NOV-2005
	Landfill 10 Site Safety and Health Plan	EM Federal Corp.	NOV-2005
	Final Groundwater Monitoring Report, Landfill 14	Shaw Group	DEC-2005
	Final Groundwater Monitoring Report - Landfill 15	Shaw Group	DEC-2005
	Final Groundwater Monitoring Report - Open Detonation Range	Shaw Group	DEC-2005
2006			
	Final Semiannual Groundwater Monitoring and Site Inspection Reports (Covering January - June 2005 & July-December 2005) for the Open Detonation Range, Landfill 14, and Landfill 15	Shaw E & I	AUG-2006
	Final Remedial Investigation Addendum Report for the Former Pesticide Mixing Area	Shaw E & I	SEP-2006
	Final Long-Term Monitoring Evaluation Report for the Maintenance Building Site	Shaw E & I	SEP-2006
2007			
	Site Safety and Health Plan for Groundwater Monitoring and Site Inspection at Landfill 10	Shaw E & I	JAN-2007
	Final Groundwater Monitoring and Site Inspection Plan for Landfill 10	Shaw E & I	MAR-2007
	Long-term Monitoring Report for Landfill 10 (Quarter 1)	Shaw E & I	MAY-2007
	Final Semiannual Groundwater Monitoring Report (January - June 2006) for the Open Detonation Range	Shaw E & I	JUN-2007
	Final Semiannual Groundwater Monitoring Report (July - December 2006) for the Open Detonation Range	Shaw E & I	JUN-2007
	Final Semiannual Groundwater Monitoring Report (January - June 2006) for Landfill 14	Shaw E & I	JUN-2007
	Final Semiannual Groundwater Monitoring Report (July - December 2006) for Landfill 14	Shaw E & I	JUN-2007
	Final Semiannual Groundwater Monitoring Report (January - June 2006) for Landfill 15	Shaw E & I	JUN-2007
	Final Semiannual Groundwater Monitoring Report (July - December 2006) for Landfill 15	Shaw E & I	JUN-2007

IRP Previous Studies

2007

Title	Author	Date
Final Quality Assurance Plan	ECC, Inc.	JUN-2007
Final Project Management Plan	ECC, Inc.	JUN-2007
Final Semiannual Groundwater Monitoring Report (January - June 2007) for Landfill 14	Shaw E & I	JUL-2007
Final Semiannual Groundwater Monitoring Report (January - June 2006) for Landfill 15	Shaw E & I	JUL-2007
Final Semiannual Groundwater Monitoring Report (January - June 2007) for Open Detonation Range	Shaw E & I	JUL-2007
Groundwater Sampling Results for the Former Wastewater Treatment Facility	Shaw E & I	AUG-2007
Long-term Monitoring Report for Landfill 10 (Quarter 2)	Shaw E & I	AUG-2007
Long-term Monitoring Report for Landfill 10 (Quarter 3)	Shaw E & I	OCT-2007
Final Remedial Investigation Work Plan - Landfill #8	ECC, Inc.	OCT-2007
Final Work Plan - Area 10,000 Barracks	ECC, Inc.	OCT-2007
Final Groundwater Pilot Study Work Plan - Pesticide Mixing Area	ECC, Inc.	NOV-2007
Final Groundwater Pilot Study Work Plan - Maintenance Buildings	ECC, Inc.	NOV-2007
Final Work Plan - Fire Training Pit	ECC, Inc.	NOV-2007
Long-term Monitoring Report for Landfill 10 (Quarter 4)	Shaw E & I	DEC-2007
Final Construction Certification Document, Landfill 10	Malcolm Pirnie, Inc.	DEC-2007

2008

Final Semiannual Groundwater Monitoring Report (July - December 2007) for the Open Detonation Range	Shaw E & I	MAY-2008
Final Semiannual Groundwater Monitoring and Site Inspection Report (July - December 2007) for Landfill 14	Shaw E & I	MAY-2008
Final Semiannual Groundwater Monitoring and Site Inspection Report (July - December 2007) for Landfill 15	Shaw E & I	MAY-2008
Long-Term Monitoring Report for Landfill 10, Quarter 5	Shaw E & I	MAY-2008
Long-term Monitoring Report for Reformatory Road Landfill (Quarter 1)	Shaw E & I	JUL-2008
Long-term Monitoring Report for Landfill 10 (Quarter 6)	Shaw E & I	AUG-2008
Groundwater Monitoring and Site Inspection Plan, Reformatory Road Landfill	Shaw E & I	AUG-2008
Long-term Monitoring for Landfill 10 (Quarter 7)	Shaw E & I	OCT-2008
Long-term Monitoring Report for Reformatory Road Landfill (Quarter 2)	Shaw E & I	OCT-2008
Final Feasibility Study, Outdoor Recreation Site	Malcolm Pirnie, Inc.	DEC-2008

2009

Final Interim Removal Action Work Plan, Fire Training Pit	ECC, Inc.	FEB-2009
Groundwater Pilot Study Work plan - Former Waste Water Treatment Plant	ECC, Inc.	MAR-2009

IRP Previous Studies

2009	Title	Author	Date
	Draft DD for Landfill 14	Shaw Environmental, Inc.	JUL-2009
	Draft DD for Landfill 15	Shaw Environmental, Inc.	JUL-2009
	Final Semiannual Groundwater Monitoring and Site Inspection Report for Landfill 14	Shaw Environmental, Inc.	AUG-2009
	Final Semiannual Groundwater Monitoring and Site Inspection Report - Landfill 15	Shaw Environmental, Inc.	AUG-2009
	Final Site Investigation - 10,000 Barracks Site	ECC, Inc.	SEP-2009
	Updated Project Management Plan	ECC, Inc.	SEP-2009
	Final Annual Groundwater Monitoring Report for Landfill 10	Shaw Environmental, Inc.	SEP-2009
2010			
	Groundwater Monitoring and Site Inspection Report, Landfill 10	Shaw E & I, Inc.	JUL-2010
	Groundwater Monitoring and Site Inspection Report, Landfill 14	Shaw E & I, Inc.	JUL-2010
	Groundwater Monitoring and Site Inspection Report, Landfill 15	Shaw E & I, Inc.	JUL-2010
	Final Proposed Plan - Outdoor Rec	MPI, Inc.	AUG-2010
	Final Proposed Plan - Landfill 16	ECC, Inc.	AUG-2010
	Final Proposed Plan - Pesticide Mixing Area	ECC, Inc.	AUG-2010
	Final Proposed Plan - Maintenance Building Site	ECC, Inc.	AUG-2010
	Final Proposed Plan - WWTP Site	ECC, Inc.	AUG-2010
2011			
	Semiannual Groundwater Monitoring Report and Site Inspection Report - Landfill 10	Shaw E & I, Inc.	JAN-2011
	Semiannual Groundwater Monitoring Report and Site Inspection Report - Landfill 10	Shaw E & I	MAY-2011
	Annual Groundwater Monitoring Report and Site Inspection Report - Landfill 14	Shaw E & I	MAY-2011
	Annual Groundwater Monitoring Report and Site Inspection Report - Landfill 15	Shaw E & I	MAY-2011
	Decision Document for the Maintenance Building Site	ECC, Inc.	SEP-2011
	Decision Document for the Maintenance Building Site	ECC, Inc.	SEP-2011
	Decision Document for the Pesticide Mixing Area Site	ECC, Inc.	SEP-2011
	Decision Document for the Landfill 8 Site	ECC, Inc.	SEP-2011
	Decision Document for the Former Wastewater Treatment Plant Site	ECC, Inc.	SEP-2011
2012			
	Annual Groundwater Monitoring Report and Site Inspection Report - Landfill 14	Shaw E & I	FEB-2012
	Annual Groundwater Monitoring Report and Site Inspection Report - Landfill 15	Shaw E & I	FEB-2012
	Final Work Plan / Sampling & Analysis Plan, Former Golf Course Maintenance Building	PIKA International, Inc.	AUG-2012
	Draft Decision Document Reformatory Road Landfill	Shaw Environmental, Inc.	AUG-2012

IRP Previous Studies

2012	Title	Author	Date
	Draft Decision Document Landfill 14	Shaw Environmental, Inc.	AUG-2012
	Draft Decision Document Landfill 10	Shaw Environmental, Inc.	SEP-2012
	Draft Decision Document Landfill 15	Shaw Environmental, Inc.	SEP-2012
	Decision Document for the Outdoor Recreation Area Site	ECC, Inc.	DEC-2012
2013			
	Final Farrar Island Archeological Resources Protection Plan	Weston Solutions, Inc.	MAR-2013
	Final Farrar Island Community Relations Plan	Weston Solutions, Inc.	APR-2013
	Final Fort Lee Rocket Range SI Work Plan	Weston Solutions, Inc.	MAY-2013
	Final Site Inspection Former Golf Course Maintenance Building	PIKA International, Inc.	JUL-2013
	Final Focused Feasibility Study 1000" 50 Caliber Machine Gun Range	Weston Solutions, Inc.	OCT-2013
	Final Project Management Plan CERCLA LTM at Ten IRP Sites	EA Engineering, Science and Technology, Inc.	NOV-2013
	Draft Base-wide Groundwater Monitoring Plan	EA Engineering, Science and Technology, Inc.	DEC-2013
2014			
	Final Project Management Plan CERCLA LTM at Ten IRP Sites	EA Engineering, Science and Technology, Inc.	FEB-2014
	Final Site Inspection Report for Rocket Range Munitions Response Site	Weston Solutions, Inc.	APR-2014
	Final Work Plan Farrar Island MRS Remedial Investigation	Weston Solutions, Inc.	APR-2014
	Final Landfill Repair Work Plan for FTLE-15 and FTLE-17	EA Engineering, Science and Technology, Inc.	APR-2014
	LTM Data Summary for Fire Training Pit	ECC, Inc.	JUL-2014
	LTM Data Summary for Wastewater Treatment Plant	ECC, Inc.	JUL-2014
	LTM Data Summary for Pesticide Mixing Area	ECC, Inc.	JUL-2014
	LTM Summary for Maintenance Building Site	ECC, Inc.	JUL-2014
	Final Landfill Repair Completion Report FTLE-15 and FTLE-17	EA Engineering, Science and Technology, Inc.	JUL-2014
	Final Base-wide Groundwater Monitoring Plan for CERCLA LTM at 10 Sites	EA Engineering, Science and Technology, Inc.	SEP-2014
	Machine Gun Range Draft DD	Weston Solutions, Inc.	NOV-2014
2015			
	Draft Annual LTM Groundwater Monitoring Report 2014	EA Engineering, Science and Technology, Inc.	JAN-2015
	Machine Gun Range Final Proposed Plan	Weston Solutions, Inc.	FEB-2015
	Farrar Island Draft Technical Memorandum	Weston Solutions, Inc.	MAR-2015
	Final Annual LTM Groundwater Monitoring Report 2014, Fort Lee, VA	EA Engineering & Technology, Inc.	NOV-2015
	Final In-situ Chemical Oxidation Injection Work Plan	EA Engineering, Inc.,	DEC-2015

FORT LEE

Installation Restoration Program

Site Descriptions

Site ID: FTLE-05
Site Name: Pesticide Mixing Area
Alias: PM Site

STATUS

Regulatory Driver: CERCLA
RRSE: HIGH
Contaminants of Concern: Volatiles (VOC)
Media of Concern: Groundwater

Phases	Start	End
PA.....	198111.....	198204
SI.....	199409.....	199512
RI/FS.....	199602.....	200809
RD.....	200701.....	200809
IRA.....	199906.....	200107
RA(C).....	200701.....	200809
RA(O).....	200701.....	200909
LTM.....	200910.....	201810
RIP Date:	200809	
RC Date:	200909	

SITE DESCRIPTION

Storage, mixing, and disposal of pesticides at Fort Lee were conducted at Building 6203 (FTLE-05) from the early-1940s until the late-1970s.

Building 6203 was located at the intersection of Shop Road and 19th Street in the cantonment area. Pesticides and rinse water were disposed of in an open ditch which ran behind the building. A perforated disposal tank and contaminated soil were removed in 1975 and the excavated area was backfilled and covered with a small concrete slab. The original building was replaced during the early-1980s, and a storm sewer was installed in the open ditch to drain the site. The storm sewer transports water about 150 feet to a ditch that drains the area. Sampling conducted during the PA/SI in 1995 found chlordane levels as high as 4.4 parts per million (ppm) in the surface sediments of the drainage ditch several hundred feet downstream of the storm sewer outfall. Lindane was also detected above action levels in groundwater. Sampling during the RI/FS revealed that herbicides (2,4-D), volatile organic compounds (VOC), polychlorinated biphenyls (PCB), and dioxin variants were also present. Pesticides were also found in a ditch that receives drainage from the area. An IRA to remove pesticide-contaminated soil from the drainage ditch was completed in 2001.

In fiscal year (FY)99, an expanded RI/FS was completed which found that there was also VOC (carbon tetrachloride and chloroform) contamination within the boundaries of the site, but upgradient of the mixing area. This contamination appeared to be unrelated to prior activities at the pesticide mixing area. Based upon a review of historical aerial photographs, interviews, and a records search, the source of this contamination seems to have been an old fire station located upgradient of the pesticide mixing area. This fire station was located near the source of the carbon tetrachloride/chloroform plume and was operated continuously from 1941 until it was demolished in the early-1970s. Additional field work conducted at the site in 2002 confirmed that the source of the plume was located near the site of the old fire station at what may have been an old storage shed. The RI was finalized in 2006.

In 2006, the site was bundled into a PBA contract which was intended to bring the site to RC. A Chemox injection was performed in 2007 which significantly reduced levels of VOCs by more than 70 percent. The latest round of groundwater sampling was performed in June 2015 and indicated that rebound was occurring. Carbon Tetrachloride, Chloroform, and Trichloroethene were detected. Nevertheless, levels of contamination were still significantly lower than before the Chemox injection. A Chemox reinjection was completed in March 2016 and groundwater at the site will be sampled in July 2016.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

Site ID: FTLE-05
Site Name: Pesticide Mixing Area
Alias: PM Site

A Chemox reinjection was completed in 2016 to eliminate rebound. Five-year reviews and LTM will continue as required.

Site ID: FTLE-06
Site Name: Buried Sewage Treatment Plant
Alias: WWTP Site

STATUS

Regulatory Driver: CERCLA
RRSE: HIGH
 Contaminants of Concern: Volatiles (VOC)
 Media of Concern: Groundwater

Phases	Start	End
PA.....	198111.....	198204
SI.....	199409.....	199512
RI/FS.....	199610.....	199908
RD.....	199908.....	200408
RA(C).....	200602.....	200909
LTM.....	200910.....	201810
RIP Date:	N/A	
RC Date:	200909	

SITE DESCRIPTION

FTLE-06 is located on the main post just south of the intersection of C Avenue and 2nd Street. From 1941 to 1979, Fort Lee operated a primary sewage treatment plant (STP) there and discharged effluent to Baileys Creek. It did not satisfy state and federal regulations for secondary treatment. Consequently, the STP was shut down and buried-in-place in 1979.

Since burial of the STP, the area has been used as a contractor staging area and as a dump site for construction and building debris. It was also discovered during the PA/SI that this site had several other buildings on it, including a large pesticide storage building and an incinerator that was used to dispose of sewage sludge and other wastes. Drawings of the STP were located and matched to present day maps of the site to determine the exact location of the pesticide storage building, and other structures. A digital comparison of 1992 topography from aerial photography with topography shown on the as-built drawings from 1941 showed that, in some places, more than 20 feet of material has been placed on the site.

Two potential pathways for contamination transport were identified at this site: surface transport of pesticides to Baileys Creek and subsurface transport of pesticides from soils to groundwater. Groundwater flow at the site is toward Baileys Creek. In addition, piping at the facility was abandoned-in-place and may serve as a conduit for contamination to reach Baileys Creek, which is located less than 50 feet from the edge of the filled-in area.

In 2007, at the request of the VDEQ, all monitoring wells were resampled. VOCs were detected in three wells; however, pesticides were not detected. In September 2008, FTLE-06 was added to the existing PBA to include RC and completion of a DD. A Chemox injection was performed in 2009 which reduced levels of VOCs by more than 80 percent. The latest round of groundwater sampling was performed in June 2015 and indicated that rebound was occurring. Tetrachloroethane and chloroform were detected, however, detections were at levels significantly lower than before the Chemox injection. A Chemox reinjection was completed in March 2016 and groundwater at the site will be sampled in July 2016.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

A Chemox reinjection was completed in 2016 to eliminate rebound. LTM and 5-year reviews will continue as required.

Site ID: FTLE-11
Site Name: Closed Landfill No. 14
Alias: LF 14

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	198111.....	198204
SI.....	199409.....	199810
RI/FS.....	199812.....	199903
RD.....	199812.....	199908
RA(C).....	200006.....	200012
LTM.....	200012.....	201810

RIP Date: N/A

RC Date: 200012

SITE DESCRIPTION

Located near the intersection of River Road and Temple Avenue, Landfill 14 (FTLE-11) served as a construction debris landfill during the 1970s (VA Solid Waste Permit No. 237). In 1977, the landfill began receiving waste, however, it was used for only a few years. Debris buried at the site consists of demolished World War II-vintage wooden buildings. The former landfill site is adjacent to a mobile home park and was often visited by children living in the area.

An SI conducted at the site in 1997 detected low levels of groundwater and surface water contamination. Leachate from the landfill appeared to be entering a stream leaving the site which flows into the Appomattox River. In November 1998, an additional downgradient monitoring well was installed.

Because this was a permitted landfill, the VDEQ required that the site be closed in accordance with VA solid waste regulations. This included determining the extent of the waste cells, covering the waste cells with at least two feet of cover material, and installing a fence around the perimeter of the permitted area. LTM was also required. In 2000, the cover thickness study was completed, additional cover material was placed on the site, and a perimeter fence was installed. The latest round of groundwater sampling was performed in June 2014 and found that contamination from the landfill was not present. The next groundwater sampling event is scheduled for 2019.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: FTLE-15
Site Name: Closed Landfill No.7
Alias: LF 15

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
PA.....	198111.....	198204
SI.....	199409.....	199909
RD.....	199906.....	200008
IRA.....	200008.....	200012
RA(C).....	200008.....	200109
LTM.....	200109.....	201810

RIP Date: N/A

RC Date: 200109

SITE DESCRIPTION

Landfill 15 (FTLE-15) is a three-acre landfill located near the center of the main post on Home Road. The earliest use of the landfill dates back to the mid-1940s when garbage and medical waste were deposited there. The landfill was again used in the 1970s for burning and disposing of construction debris.

In the mid-1990s, Fort Lee constructed a fire training facility on the landfill. During the installation of a water line at the site, waste material, including medical waste dating to the mid-1940s, was discovered. A PA was completed which indicated that an SI was required to determine whether groundwater contamination was occurring. In 1995, analyses of soil samples found that action levels were exceeded for arsenic, beryllium, thallium, zinc and lead. Groundwater samples exceeded action levels for arsenic, manganese and thallium. Base/neutral acids (BNA) and VOCs were detected below action levels. Levels of metals and VOCs indicated that contaminants may have been released from the site.

This site is less than 700 feet from a new family housing area and is also used for training activities; hence there are potential human receptors of contamination. Access to the area is restricted and personnel involved with training activities at the site are instructed on how to minimize their potential exposure to waste materials. Although contaminant levels were low, the VDEQ requested confirmatory sampling be undertaken to define the source of metals found in the soils and groundwater and to determine the extent of contamination so that risk could be estimated. The confirmatory sampling was undertaken in fall 1997. After reviewing this data, the VDEQ concluded that interim actions to mitigate potential risk were required. Landfill boundary delineation was completed using exploratory trenching and grading of existing cover material and placement of additional cover was required to meet landfill compliance requirements. LTM of monitoring wells was also required.

Field work at FTLE-15 was completed in May 2002 and included placement of additional cover material to ensure that there was two feet of cover material across the entire site. In addition, drainage at the site was improved by re-grading and filling in areas where water had been impounded.

In June 2014 the fire training facility located on the landfill was demolished and removed from the landfill. All materials on the site were recycled. The landfill cap was restored and replanted with appropriate vegetation. The latest round of groundwater sampling was performed in June 2014. The next groundwater sampling event is scheduled for 2019.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: FTLE-16
Site Name: Closed Landfill No.8
Alias: LF 16

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	198801.....	198804
SI.....	199409.....	200110
RI/FS.....	200701.....	200908
RA(C).....	200701.....	200909
LTM.....	201102.....	201810

RIP Date: N/A

RC Date: 200909

SITE DESCRIPTION

Landfill No. 8 is located just west of Landfill 15 on the western side of Home Road. This three- to four-acre landfill appears to have only been used for construction debris on several occasions beginning in the 1940s. The site reportedly was used intermittently as late as the early-1980s. Contents of the landfill were leaves, stumps, logs, and assorted construction debris.

Analyses of groundwater samples at Landfill No. 8 exceeded action levels for beryllium, chromium, manganese, and lead. Soil action levels were exceeded for barium and lead. No VOCs or BNAs were detected above action levels.

Levels of metals and VOCs indicate that contaminants may have been released at this site. Landfill No.8 is less than 700 feet from a new family housing area and is also used for training activities; hence there are potential human receptors of contamination. Access to the area is restricted and personnel involved with training activities at the site are instructed in how to minimize their potential exposure to waste materials. Although contaminant levels were low, the VDEQ requested that confirmatory sampling define the source of metals found in the soils and groundwater and to determine the extent of contamination so that risk could be estimated. Additional sampling was undertaken in 1997. After reviewing these data, the VDEQ concluded that additional actions to mitigate potential ecological risk were required.

FTLE-16 was bundled into a PBA for completion of an RI/FS/ DD. The RI/FS, which was completed in 2012, recommended LTM. The latest groundwater sampling was performed in June 2014. The next groundwater sampling event is scheduled for 2018.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: FTLE-17

Site Name: Closed Landfill Nos.4, 5 and 6

Alias: FTLE-17

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	198111.....	198204
SI.....	198904.....	199109
RI/FS.....	199404.....	200804
IRA.....	199810.....	199912
LTM.....	200806.....	201810

RIP Date: N/A

RC Date: 200804

SITE DESCRIPTION

Landfill Nos. 4, 5, and 6 (FTLE-17) are located on the main post at the southern terminus of 5th Street, just south of its intersection with C Avenue. 5th Street bisects the site, with Landfills No.4 and No.6 located on the east side and Landfill No.5 located on the western side. An active skeet range is located on and adjacent to Landfills No.4 and No.6. Landfill No.5 is the location of a baseball field and a recreation/picnic area.

Prior investigations resulted in a grouping of three adjacent landfills. Various outdoor recreation facilities and several permanent buildings have been located on portions of the abandoned landfills. Landfill No.4 operated from 1950 to the early-1960s. Landfill No.5 operated from 1949 to the early to mid-1960s. Information indicating when Landfill No.6 began operating is not available; however, the landfill was closed circa 1976. Garbage, construction debris, and coal ash were reportedly dumped in this landfill. In April 1989, a leachate seep was discovered on the northeast side of Landfill No.5.

In 1989, the US Army Environmental Hygiene Agency installed six monitoring wells. A source of contamination was found to be aboveground tanks located on abandoned Landfill No. 5. Additional investigations carried out as part of a PA/SI revealed low levels of petroleum hydrocarbon contamination in groundwater and low levels of halogenated solvents in soils near an upgradient monitoring well.

In November 1994, several inches of free-phase liquid fuel product (free-product) were discovered in one of the monitoring wells. The free-product appeared to be diesel fuel. The source of the fuel may have been one or more of the four large aboveground storage tanks (AST) (about 1000 barrel capacity each) located at this site until the early-1980s. Direct-push water samples near this well found that contamination was restricted to this immediate area. Borings at the locations of the large AST showed total petroleum hydrocarbons (TPH) levels as high as 350 ppm. In 1995, a stream bordering the western side of the landfill started to erode into the landfill. Layers of coal ash and other debris were seen on the bank of the stream and reddish water was flowing into the stream along the coal ash/soil interface. Portions of this stream (approximately three-fourths of a mile upstream) had been recently straightened and replaced with a large diameter (approximately six feet) culvert that served as the storm sewer for a housing area. This resulted in significantly higher streamflow during and after heavy rains which caused the erosion. In consultation with the VDEQ, an IRA was carried out to relocate the stream away from the landfill. This IRA, successfully completed in November 2000, involved the installation of rock-filled gabions (large wire baskets) and riprap along more than 450 feet of the stream.

Settling in some of the waste cells of as much as two to three feet has occurred in a portion of the landfill located under a softball field. Because of the potential human receptors in the area (i.e., visitors to the baseball fields or picnic areas) the VDEQ requested that a more comprehensive risk assessment be undertaken. In 2004 an RI was completed and a draft FS was submitted to the VDEQ. The VDEQ requested that a landfill cover thickness study be carried out and used to prepare the final FS. The cover thickness study, carried out in 2007, found that there was sufficient soil cover across the entire site; therefore, capping was not required. However, cap restoration was successfully completed for these areas in June 2014. The latest round of groundwater sampling was performed in June 2014. Future groundwater sampling requirements, if any, will be reevaluated as part of the five-year review process. Until then, this remains a zero cost site.

Site ID: FTLE-17
Site Name: Closed Landfill Nos.4, 5 and 6
Alias: FTLE-17

Note: All future five-year review costs are now tracked in site CCFTLE-33

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: FTLE-19
Site Name: Landfill No.10
Alias: LF 10

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Metals, Pesticides, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	198111.....	199006
SI.....	199006.....	199109
RI/FS.....	199802.....	199908
RD.....	200101.....	200408
RA(C).....	200406.....	200612
LTM.....	200701.....	201810

RIP Date: N/A

RC Date: 200612

SITE DESCRIPTION

Landfill No. 10 (FTLE-19) encompasses approximately 12 acres and is located near 38th Street and H Avenue on the main post. It received municipal waste from the late-1940s to the early-1950s. Aerial photographs indicate that the landfill was operated as a trench and fill landfill, where non-specific debris was dumped and covered with soil.

Landfill No. 10 is at the boundary of the installation and is less than 100 feet from a trailer park.

Until 2005 there was no perimeter fence around Fort Lee and children from the surrounding area were observed playing on the landfill on many occasions. The site has since been posted and access to the site is restricted by the installation perimeter fence. The area was also used for troop training activities; some involved digging into the landfill. Intrusive training activities on the landfill were discontinued in the late-1990s.

Groundwater sampling performed in 1995 showed low levels of pesticide contamination. In seven of the eight water samples collected at least one pesticide analyte above action levels was detected. The source of contamination is not clear since an upgradient well was also contaminated. The trailer park is on city water and groundwater is not used for drinking. An RI was completed in 1999 and indicated a low human health risk. The FS indicated that the site required some institutional controls to better restrict access by trespassers. The VDEQ requested that the landfill be closed in accordance with VA solid waste regulations.

A landfill cover study completed in November 2000 found that cover thickness varied across the landfill and was less than the required two feet across most of the landfill. In addition, there were large areas of standing water on the landfill. To eliminate these problems, the site was cleared, re-graded, and a soil cap was completed in 2006. The latest round of groundwater sampling was performed in June 2014. The next groundwater sampling event is scheduled for 2019.

Note: All future five-year review costs are now tracked in site CCFTLE-33

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: FTLE-24

Site Name: Maintenance Bldgs. No.6241 AND 6243

Alias: MB Site

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
PA.....	198111.....	198204
SI.....	199006.....	199109
RI/FS.....	199404.....	200208
RD.....	200701.....	200809
RA(C).....	200701.....	200809
RA(O).....	200701.....	200909
LTM.....	200910.....	201810

RIP Date: 200809

RC Date: 200909

SITE DESCRIPTION

Located near Shop Road and 8th Street, the Maintenance Building Area (FTLE-24) is the site of vehicle and heavy equipment maintenance, and, at one time, a furniture refinishing operation.

Between 1940 and 1941, French-drain dry-well systems were designed and installed to receive waste fluids from each building. The fluids were collected by floor drains located inside each building and included transmission fluid, battery acid, crankcase oil, and wash water used for cleaning engine parts. The fluids were channeled through the floor drains into the French-drain systems where they infiltrated into the subsurface. In the early-1990s, all drainage pipes from these buildings were connected to the sanitary sewer system.

Vehicle wash activities were conducted adjacent to Building 6242 and included general tanker trucks, truck bed and various truck parts washing. Wash water generated during these operations reportedly was allowed to run off the pad and infiltrate into the ground. Leaks were found in underground storage tanks (UST) located adjacent to the buildings and they have since been removed and remediated. The extent of contamination did not appear to be extensive.

An RI found low levels of contamination over about 10 acres; however, significant levels of contamination were found in only a few locations, generally in the vicinity of vehicle parking areas. In 2005, because existing analytical data were several years old, the VDEQ requested that a subset of the existing monitoring wells be resampled to determine if levels of contamination had decreased over time. Three additional monitoring wells were installed in 2005 to determine whether the plume had migrated beyond the original site boundaries. The risk assessment was also updated with the new data to include the Johnson-Ettinger Indoor Air Quality Model to determine if building air quality was impacted by groundwater contamination. Results indicate that, in general, groundwater contaminant levels have remained steady or are decreasing.

In 2006, the site was bundled into a PBA contract which was intended to bring the site to RC. A Chemox injection was performed in 2007 which significantly reduced levels of VOCs by more than 90 percent. The latest round of groundwater sampling was performed in June 2015 and indicated that rebound was occurring. 1,2-Dichloroethane, Trichloroethane, and Tetrachloroethane were detected, however, the levels of contamination were still significantly lower than before the Chemox injection. A Chemox reinjection was completed in March 2016 and groundwater at the site will be sampled in July 2016.

Note: All future five-year review costs are now tracked in site CCFTLE-33.

CLEANUP/EXIT STRATEGY

A Chemox reinjection was completed in 2016 to eliminate rebound. LTM and 5-year reviews will continue as required.

Site ID: FTLE-31
Site Name: Fire Training Pit
Alias: FTP Site

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
PA.....	198111.....	198204
SI.....	199404.....	199704
RI/FS.....	200701.....	200908
RD.....	200701.....	200908
RA(C).....	200701.....	200909
LTM.....	200910.....	201810

RIP Date: N/A

RC Date: 200909

SITE DESCRIPTION

FTLE-31 is located on the main post near the intersection of 38th Street and H Avenue. The fire training pit was active from the late-1960s until 1980.

In 1991, soil samples near the pit detected TPH, benzene, toluene, ethylbenzene, xylene (BTEX), and total organic halogens. Results from a 1995 PA/SI indicate that there was no contamination in the vicinity of a nearby hazardous waste collection area; however, there was a significant amount of contamination present at the location of the old fire pit.

Diesel range organics were as high as 6,000 ppm in surface sediments near the fire pit. Direct-push soil samples were as high as 1,350 ppm at a depth of 11 feet near the location of the abandoned fire pit. The VDEQ recommended that a RI/FS be conducted around the area of the fire pit.

In 2006, the site was bundled into a PBA contract which was intended to bring the site to RC. Field work for the RI was completed in December 2007. Based on the results of the RI, approximately 1,425 cubic yards of contaminated soil was excavated in February 2009 and the site was restored. The latest round of groundwater sampling was performed in July 2015 and indicated the presence of BTEX, 2-methylnaphthalene, and naphthalene, albeit at low levels. The next groundwater sampling event is scheduled for July 2016.

Note: All future five-year review costs are now tracked in site CCFTLE-33

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTLE-01	BLDG 6040	198204	Site not DERA eligible
FTLE-02	230 UST'S (47 LEAKERS)	199206	Site not DERA eligible.
FTLE-03	HAZ WASTE STORAGE	198204	Site not DERA eligible.
FTLE-04	HOSPITAL INCINERATOR	198204	Site not DERA eligible.
FTLE-07	PETROLEUM TRAINING FACILITY	199802	Letter from VDEQ dated 01 DEC 1997
FTLE-08	MOTOR POOL 1 (240TH)	199110	Site not DERA eligible.
FTLE-09	MOTOR POOL 2 (BLDGS 6274, 6275)	199110	Site not DERA eligible.
FTLE-10	FIRING RANGES	198204	Site not DERA eligible.
FTLE-12	CLOSED LANDFILLS #13	198204	Site not DERA eligible.
FTLE-13	CLOSED LANDFILL #12	198204	Site not DERA eligible.
FTLE-14	CLOSED LANDFILL #11	198204	Site not DERA eligible.
FTLE-18	REFORMATORY ROAD LANDFILL	200504	Transferred to AEDB-CC at request of USAEC.
FTLE-20	CONSTRUCTION DEBRIS BURIAL-SCHUYLKILL LF	199501	Site not DERA eligible.
FTLE-21	CONTAMINATED GRAIN BURIAL (LF#17)	198204	Site not DERA eligible.
FTLE-22	METHYL BROMIDE BURIAL (LF#18)	198204	Site not DERA eligible.
FTLE-23	ROCKET LAUNCHER SHELL BURIAL (LF#16)	198204	Site not DERA eligible.
FTLE-25	MAINTENANCE BLDG #6242	199812	Site has been combined with FTLE-24.
FTLE-26	MILITARY IN THE FIELD TRAINING FACILITY	200110	Letter from VDEQ dated 19 OCT 01
FTLE-27	OPEN DETONATION RANGE	201001	Site located within Operational Range Area, not DERA eligible.
FTLE-28	BLOCK 4100 AREA UST	199308	PA/SI Report for Eight Sites (James M. Montgomery, DEC 92)
FTLE-29	FORMER PETROLEUM TRAINING AREA	200110	Letter from VDEQ date 19 OCT 01
FTLE-30	INACTIVE FIRE TRAINING AREA	199908	Site Closeout Report (Fluor Daniel, Inc., APR 99)
FTLE-32	AREA 10000 BARRACKS LANDFILL	200909	Final SI Report for Area 10,000 Barracks Site, Fort Lee, VA. ECC, Inc. September 2009
PBC @ Ft Lee	PBC	201403	Not a physical site location

IRP Schedule

Date of IRP Inception: 198111

Past Phase Completion Milestones

1982

PA (FTLE-05 - Pesticide Mixing Area, FTLE-06 - Buried Sewage Treatment Plant, FTLE-10 - FIRING RANGES, FTLE-11 - Closed Landfill No. 14, FTLE-12 - CLOSED LANDFILLS #13, FTLE-13 - CLOSED LANDFILL #12, FTLE-14 - CLOSED LANDFILL #11, FTLE-15 - Closed Landfill No.7, FTLE-17 - Closed Landfill Nos.4, 5 and 6, FTLE-21 - CONTAMINATED GRAIN BURIAL (LF#17), FTLE-22 - METHYL BROMIDE BURIAL (LF#18), FTLE-23 - ROCKET LAUNCHER SHELL BURIAL (LF#16), FTLE-24 - Maintenance Bldgs. No.6241 AND 6243, FTLE-27 - OPEN DETONATION RANGE, FTLE-28 - BLOCK 4100 AREA UST, FTLE-29 - FORMER PETROLEUM TRAINING AREA, FTLE-30 - INACTIVE FIRE TRAINING AREA, FTLE-31 - Fire Training Pit)

RFA (FTLE-01 - BLDG 6040, FTLE-03 - HAZ WASTE STORAGE, FTLE-04 - HOSPITAL INCINERATOR, FTLE-20 - CONSTRUCTION DEBRIS BURIAL-SCHUYLKILL LF)

1988

PA (FTLE-16 - Closed Landfill No.8, FTLE-25 - MAINTENANCE BLDG #6242)

1990

PA (FTLE-19 - Landfill No.10)

1991

CS (FTLE-20 - CONSTRUCTION DEBRIS BURIAL-SCHUYLKILL LF)

PA (FTLE-07 - PETROLEUM TRAINING FACILITY)

SI (FTLE-07 - PETROLEUM TRAINING FACILITY, FTLE-17 - Closed Landfill Nos.4, 5 and 6, FTLE-19 - Landfill No.10, FTLE-24 - Maintenance Bldgs. No.6241 AND 6243, FTLE-25 - MAINTENANCE BLDG #6242, FTLE-27 - OPEN DETONATION RANGE, FTLE-28 - BLOCK 4100 AREA UST, FTLE-30 - INACTIVE FIRE TRAINING AREA)

1992

SI (FTLE-18 - REFORMATORY ROAD LANDFILL, FTLE-26 - MILITARY IN THE FIELD TRAINING FACILITY)

INV (FTLE-02 - 230 UST'S (47 LEAKERS), FTLE-08 - MOTOR POOL 1 (240TH), FTLE-09 - MOTOR POOL 2 (BLDGS 6274, 6275))

ISC (FTLE-02 - 230 UST'S (47 LEAKERS), FTLE-08 - MOTOR POOL 1 (240TH), FTLE-09 - MOTOR POOL 2 (BLDGS 6274, 6275))

PA (FTLE-18 - REFORMATORY ROAD LANDFILL, FTLE-26 - MILITARY IN THE FIELD TRAINING FACILITY)

1996

SI (FTLE-05 - Pesticide Mixing Area, FTLE-06 - Buried Sewage Treatment Plant)

1997

PA (FTLE-32 - AREA 10000 BARRACKS LANDFILL)

SI (FTLE-31 - Fire Training Pit)

1998

RA(O) (FTLE-07 - PETROLEUM TRAINING FACILITY)

RI/FS (FTLE-27 - OPEN DETONATION RANGE)

RA(C) (FTLE-07 - PETROLEUM TRAINING FACILITY)

1999

RD (FTLE-11 - Closed Landfill No. 14)

RI/FS (FTLE-06 - Buried Sewage Treatment Plant, FTLE-11 - Closed Landfill No. 14, FTLE-18 - REFORMATORY ROAD LANDFILL, FTLE-19 - Landfill No.10, FTLE-25 - MAINTENANCE BLDG #6242, FTLE-30 - INACTIVE FIRE TRAINING AREA)

SI (FTLE-11 - Closed Landfill No. 14, FTLE-15 - Closed Landfill No.7)

2000

PA (PBC @ Ft Lee - PBC)

RD (FTLE-15 - Closed Landfill No.7, FTLE-27 - OPEN DETONATION RANGE)

IRA (FTLE-17 - Closed Landfill Nos.4, 5 and 6)

2001

RA(C) (FTLE-11 - Closed Landfill No. 14, FTLE-15 - Closed Landfill No.7, FTLE-27 - OPEN DETONATION RANGE)
 IRA (FTLE-05 - Pesticide Mixing Area, FTLE-15 - Closed Landfill No.7)
 RI/FS (FTLE-26 - MILITARY IN THE FIELD TRAINING FACILITY)
 SI (FTLE-29 - FORMER PETROLEUM TRAINING AREA)

2002

RI/FS (FTLE-24 - Maintenance Bldgs. No.6241 AND 6243)
 SI (FTLE-16 - Closed Landfill No.8)

2003

RD (FTLE-18 - REFORMATORY ROAD LANDFILL)

2004

RD (FTLE-06 - Buried Sewage Treatment Plant, FTLE-19 - Landfill No.10)

2005

RA(C) (FTLE-18 - REFORMATORY ROAD LANDFILL)

2007

RI/FS (PBC @ Ft Lee - PBC)
 RA(C) (FTLE-19 - Landfill No.10)

2008

RI/FS (FTLE-05 - Pesticide Mixing Area, FTLE-17 - Closed Landfill Nos.4, 5 and 6)
 RD (FTLE-05 - Pesticide Mixing Area, FTLE-24 - Maintenance Bldgs. No.6241 AND 6243)
 RA(C) (FTLE-05 - Pesticide Mixing Area, FTLE-24 - Maintenance Bldgs. No.6241 AND 6243)

2009

RD (FTLE-31 - Fire Training Pit)
 RA(C) (FTLE-06 - Buried Sewage Treatment Plant, FTLE-16 - Closed Landfill No.8, FTLE-31 - Fire Training Pit, PBC @ Ft Lee - PBC)
 RI/FS (FTLE-16 - Closed Landfill No.8, FTLE-31 - Fire Training Pit, FTLE-32 - AREA 10000 BARRACKS LANDFILL)
 RA(O) (FTLE-05 - Pesticide Mixing Area, FTLE-24 - Maintenance Bldgs. No.6241 AND 6243)

2010

LTM (FTLE-27 - OPEN DETONATION RANGE)

2014

LTM (PBC @ Ft Lee - PBC)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID	Site Name	ROD/DD Title	ROD/DD Date
FTLE-11	Closed Landfill No. 14	Closed Landfill 14	20161230
FTLE-24	Maintenance Bldgs. No.6241 AND 6243	Decision Document for FTLE-24	20161230
FTLE-15	Closed Landfill No.7	Closed Landfill 15	20161230
FTLE-17	Closed Landfill Nos.4, 5 and 6	Closed Landfills 4, 5, and 6	20161230

IRP Schedule

Final RA(C) Completion Date: 200909

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of IRP at Installation (including LTM phase): 201810

FORT LEE IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-05	Pesticide Mixing Area	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-06	Buried Sewage Treatment Plant	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-11	Closed Landfill No. 14	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-15	Closed Landfill No.7	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-16	Closed Landfill No.8	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-17	Closed Landfill Nos.4, 5 and 6	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-19	Landfill No.10	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-24	Maintenance Bldgs. No.6241 AND 6243	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-31	Fire Training Pit	LTM						

FORT LEE
Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 6/3

Installation Site Types with Future and/or Underway Phases

- 1 Firing Range
(FTLE-002-R-02)
- 1 Small Arms Range
(FTLE-005-R-01)
- 1 Unexploded Munitions/Ordnance
(FTLE-001-R-01)

Most Widespread Contaminants of Concern

Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern

Groundwater, Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FTLE-005-R-01	1000" .50 Caliber Machine Gun Range	FRA	INSTITUTIONAL CONTROLS	2014

Duration of MMRP

Date of MMRP Inception 200111

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201707/201707

Date of MMRP completion including Long Term Management (LTM): 204610

MMRP Contamination Assessment

Contamination Assessment Overview

The Department of Defense (DoD) has established the MMRP under the Defense Environmental Restoration Program to address DoD sites with MEC including unexploded ordnance (UXO), discarded military munitions (DMM) and MC.

The US Army's inventory of closed, transferred, or transferring (CTT) military ranges and sites has identified sites eligible for action under MMRP. The MMRP-eligible sites include other than operational ranges where UXO, DMM, or MC is known or suspected and the release occurred prior to Sept. 30, 2002. Properties classified as operational ranges are not eligible and are therefore excluded from the MMRP program.

The MMRP began in the late-1990s as a result of key drivers such as processes outlined in the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) as authorized by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 US Code 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499.

The process began with three phases of range inventories. Phase I consisted of installations completing an initial data call. USAEC managed the implementation of Phases II and III of the MMRP inventory. The Phase II inventory dealt with active and inactive range considerations. Phase III involved the CTT range inventory conducted in 2002 which included extensive mapping, data collection for upload to the US Army Range Inventory Database, an assessment of explosives safety risk using the munitions response site-prioritization protocol (MRSPP) methodology for CTT ranges or sites with UXO or DMM identified in the inventory, and determination of which sites on the inventory potentially qualify for the MMRP. An RI is currently underway for FTLE-001-R-01 and is scheduled for completion in FY16. A remedial action will be not required. An RI for FTLE-002-R-02 is underway and will be completed in 2017. Because FTLE-005-R-01 is located in an area protected by existing cultural resource LUCs. No additional action will be required.

Cleanup Exit Strategy

The installation finalized the SI in 2008 and is executing appropriate follow-on phases/actions as required in the individual site cleanup strategies. RIs are underway at FTLE-001-R-01 and FTLE-002-R-02. FTLE-002-R-01 required NFA. FTLE-005-R-001 is being handled under existing LUCs already in place at the site.

MMRP Previous Studies

Year	Title	Author	Date
2002	US Army CTT Range/Site Inventory for Fort Lee, VA	Malcolm Pirnie, Inc.	AUG-2002
2007	Final Historical Records Review, Fort Lee, Virginia MMRP	URS	JUN-2007
	MMRP Site Inspection Work Plan, Fort Lee, Virginia	URS	SEP-2007
2008	Final Site Inspection Report, Fort Lee, Virginia Military Munitions Response Program	URS	MAY-2008
2009	Final Project Management Plan	ECC, Inc.	DEC-2009
	Final Quality Assurance Plan	ECC, Inc.	DEC-2009
	Final Accident Prevention Plan	ECC, Inc.	DEC-2009
2010	Stakeholder Draft Work Plan - Remedial Investigation MMRP Program, Fort Lee, VA	ECC, Inc.	FEB-2010
	Final RI Work plan for FTLE-002-R-01	ECC, Inc.	APR-2010
	Final RI Work Plan - FTLE-005-R-01	ECC, Inc.	APR-2010
	Final HRR Addendum Farrar Island MRS Fort Lee, VA	ERT, Inc.	DEC-2010
	Draft RI Report for FTLE-002-R-01	ECC, Inc.	DEC-2010
	Draft RI Report for FTLE-005-R-01	ECC, Inc.	DEC-2010
2011	Final RI Report for FTLE-005-01	ECC, Inc.	JUN-2011
	Final RI Report for FTLE-002-R-01	ECC, Inc.	JUN-2011
2013	Final Focused Feasibility Study 1000" 50 Caliber MGR	Weston Solutions, Inc.	OCT-2013
2014	Draft Fort Lee MGR Decision Document	Weston Solutions, Inc.	JAN-2014
	Final SI Report for Rocket Range MRS	Weston Solutions, Inc.	APR-2014
	Final Work Plan Farrar Island MRS Remedial Investigation	Weston Solutions, Inc.	APR-2014
2015	Final Proposed Plan, Machine Gun Range	Weston	MAR-2015
	Final Work Plan Technical Memorandum No. 1, Geophysical Investigation Results and Proposed Intrusive Investigations, Farrar Island MRS	Weston	JUL-2015
	Draft Final DD, Machine Gun Range	Weston	OCT-2015
	Draft Land Use Control Implementation Plan. Machine Gun Range	Weston	OCT-2015
	Draft Remedial Investigation Report, Farrar Island MRS	Weston	DEC-2015
2016			

MMRP Previous Studies

2016

Title	Author	Date
Draft Final APP/SSHP for FTLE-002-R-02 and CCFTLE-34	Arcadis, Inc.	FEB-2016
Draft Final UFP Qapp for FTLE-002-R-02 and CCFTLE-34	Arcadis, Inc.	MAR-2016

FORT LEE

Military Munitions Response Program

Site Descriptions

Site ID: FTLE-001-R-01
Site Name: Farrar Island Artillery Range
Alias: None

STATUS

Regulatory Driver: CERCLA
MRSPP Score: 05
 Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)
 Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200111.....	200305
SI.....	200606.....	201109
RI/FS.....	201203.....	201703
RIP Date:	N/A	
RC Date:	201707	

SITE DESCRIPTION

Farrar Island is located along the James River approximately 10 miles north of the current Fort Lee installation boundary. Farrar Island served as an impact area for artillery during World War I for ordnance that was fired from the area known as Dutch Gap. The artillery range was later named Camp McGlaughlin and was used extensively by all of Camp Lee's artillery units for service firing of 3-inch and, later, 4.7-inch guns. Today, Dominion Resources, Inc. operates a power generation facility on Farrar Island. The rest of the Island is contained within Henricus County Park, a portion of which is used for primitive camping. The range is considered transferred because the property is not owned by the US Army. The information for the island was obtained from a 1996 report written by the USACE. The investigation team did not physically inspect the island, but according to the archive search report, it is likely that the island contains ordnance and explosives items including UXO. In October 2007, field work for the SI was performed. The final SI recommended an RI for this site. Additional information discovered in 2009 about range usage resulted in an expanded historical records review (HRR) SI to update the munitions response site (MRS) boundary. The expanded HRR SI concluded that the impact area needed to be increased from 547 acres to more than 5,600 acres. The draft RI was completed in 2016 and is under review at the VDEQ. An abbreviated FS, PP, and DD will be funded in FY16 and will not include a remedial action. Any additional cost estimates, if required, will be delayed until the FS, PP, and DD have been completed. Until then, this remains a zero cost site.

CLEANUP/EXIT STRATEGY

An RI is underway and scheduled for completion in 2017. Determination of whether an RA will be required will be made after completion of the RI.

Site ID: FTLE-002-R-02
Site Name: Rocket Range
Alias: None

STATUS

Regulatory Driver: CERCLA
MRSPP Score: 03
Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	201001.....	201101
SI.....	201102.....	201405
RI/FS.....	201502.....	201703
RIP Date:	N/A	
RC Date:	201703	

SITE DESCRIPTION

During the RI for the 1,000-inch small bore machine gun range (FTLE-002-R-01) several live 2.36-inch rockets were discovered. This was not a known historical use of the range and indicates that this site may overlap a previously unknown rocket range. An HRR, completed as part of the SI, found that the range was located on the site of the existing Fort Lee Golf Course.

The SI was finalized in 2014 and recommended completion of an RI/FS to perform a risk assessment and better characterize potential MC contamination near the firing point and impact area. The RI contract was awarded in September 2015. A draft work plan has been prepared and is under review at the VDEQ. Until the RI is completed, there is not enough information available to determine if any remedial actions will be required at the site. Therefore, the preparation of a cost estimate, if required, has been delayed until the RI is completed. Until then, this remains a zero cost site.

CLEANUP/EXIT STRATEGY

Determine the source and potential distribution of MEC associated with the 2.36-inch rockets found at the site. An RI is underway.

Site ID: FTLE-005-R-01
Site Name: 1000" .50 Caliber Machine Gun Range
Alias: None

STATUS

Regulatory Driver: CERCLA
MRSPP Score: 07
Contaminants of Concern: Munitions constituents (MC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200111.....	200305
SI.....	200606.....	200806
RI/FS.....	200907.....	201401
RA(C).....	201202.....	201409
LTM.....	201610.....	204610
RIP Date:	N/A	
RC Date:	201409	

SITE DESCRIPTION

The location of this small arms range MRS was not evident on a 1937 photograph, but was evident on a 1949 photograph; however, its actual location is slightly to the west of the location shown on the historical maps. As a result, the slight westward shift in the actual range location causes roughly the western half of the range to be located in the operational range portion of Fort Lee and roughly the eastern half of the range to be located in the nonoperational range area of Fort Lee. The direction of fire of the 0.50-caliber machine guns used on this range was southeastward toward the berm.

This MRS encompasses the mapped berm and areas where soil lead concentrations exceeded background, totaling 2.3 acres. In October 2007 field work for the SI was completed. An RI was completed in 2011. The FS was completed in 2013. The DD and PP are under review at the VDEQ.

Due to the presence of significant cultural resources dating back to World War I activities on the site, LUCs restricting access were already in place. A removal action was deemed inappropriate because of the potential for damage to the cultural resources and the fact that the site could not be returned to unrestricted use after the removal action.

CLEANUP/EXIT STRATEGY

Because the site is already protected by cultural resource LUCs, there should be no additional work required for the site other than five-year reviews.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTLE-002-R-01	1000 In Sm Bore Machine Gun Range	201203	Final Focused Feasibility Study Report. October 2013. Weston Solutions, Inc. Norfolk, VA 23513
FTLE-003-R-01	Area D - On Post	200806	Final Site Inspection Report, Fort Lee, VA Military Munitions Response Program. May 2008. URS Group, Inc. Gaithersburg, MD 20878.
FTLE-004-R-01	Area D - Off Post	200806	Final Site Inspection Report, Fort Lee, VA Military Munitions Response Program. May 2008. URS Group, Inc. Gaithersburg, MD 20878.

MMRP Schedule

Date of MMRP Inception 200111

Past Phase Completion Milestones

2003

PA (FTLE-001-R-01 - Farrar Island Artillery Range, FTLE-002-R-01 - 1000 In Sm Bore Machine Gun Range, FTLE-003-R-01 - Area D - On Post, FTLE-004-R-01 - Area D - Off Post, FTLE-005-R-01 - 1000" .50 Caliber Machine Gun Range)

2008

SI (FTLE-002-R-01 - 1000 In Sm Bore Machine Gun Range, FTLE-003-R-01 - Area D - On Post, FTLE-004-R-01 - Area D - Off Post, FTLE-005-R-01 - 1000" .50 Caliber Machine Gun Range)

2011

SI (FTLE-001-R-01 - Farrar Island Artillery Range)

PA (FTLE-002-R-02 - Rocket Range)

2012

RI/FS (FTLE-002-R-01 - 1000 In Sm Bore Machine Gun Range)

2014

RI/FS (FTLE-005-R-01 - 1000" .50 Caliber Machine Gun Range)

SI (FTLE-002-R-02 - Rocket Range)

RA(C) (FTLE-005-R-01 - 1000" .50 Caliber Machine Gun Range)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date: 201409

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of MMRP at Installation (including LTM phase): 204610

FORT LEE MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-001-R-01	Farrar Island Artillery Range	RI/FS						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-002-R-02	Rocket Range	RI/FS						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTLE-005-R-01	1000" .50 Caliber Machine Gun Range	LTM						

FORT LEE
Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 2/0

Installation Site Types with Future and/or Underway Phases

1 Landfill
(CCFTLE-33)
1 Maintenance Yard
(CCFTLE-34)

Most Widespread Contaminants of Concern

Metals, Volatiles (VOC)

Media of Concern

Groundwater

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
CCFTLE-33	Reformatory Road LF	FRA	CAPPING	2005

Duration of CR

Date of CR Inception: 199104

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201712/201712

Date of CR completion including Long Term Management (LTM): 204312

CR Contamination Assessment

Contamination Assessment Overview

There are two Compliance Restoration (CR) sites at Fort Lee: the Reformatory Road Landfill (CCFTLE-33) and the former Golf Course Maintenance Building (CCFTLE-34). Site CCFTLE-33 is a 35-acre landfill located in the northern portion of the installation adjacent to the Appomattox River. Originally closed in 1983, the landfill was recapped in 2003-2005. LTM is underway at CCFTLE-33.

Site CCFTLE-34 was a golf course maintenance facility which burned sometime during the late-1960s. The building was reportedly used to store fuel, fertilizers, pesticides, and herbicides. There are at least two USTs which have been located at the site. An SI was completed in 2013 and recommended completion of an RI and removal of the USTs. The RI is underway.

Cleanup Exit Strategy

Pursue a reduction in monitoring frequency at CCFTLE-33. Complete the RI and remove the USTs at CCFTLE-34.

CR Previous Studies

	Title	Author	Date
2011			
	Long-term Monitoring Report for Reformatory Road Landfill (RL Site)	Shaw E & I	JAN-2011
2012			
	Long-term Monitoring Report for Reformatory Road Landfill	Shaw E & I	FEB-2012
	SI Work Plan for the Golf Course Maintenance Facility	PIKA, Inc.	FEB-2012
2013			
	Final SI for Golf Course Maintenance Building	PIKA International, Inc.	JUL-2013

FORT LEE
Compliance Restoration
Site Descriptions

Site ID: CCFTLE-33
Site Name: Reformatory Road LF
Alias: RL Site

STATUS

Regulatory Driver: RCRA
 Contaminants of Concern: Metals, Volatiles (VOC)
 Media of Concern: Groundwater

Phases	Start	End
RFA.....	199104.....	199209
CMI(C).....	200203.....	200501
LTM.....	200612.....	204312
RIP Date:	N/A	
RC Date:	200501	

SITE DESCRIPTION

This site was formerly known in AEDB-R as FTLE-18. It was renamed CCFTLE-33 when it was changed to a compliance site. The following summarizes prior activities at the site.

The Road Landfill (RL) site (alias for CCFTLE-33) is located approximately 2.6 miles north of the main operational grounds of Fort Lee. The RL site, which comprises approximately 40 acres, is bounded to the north by undeveloped acreage of the Federal Reformatory-Petersburg (FCI- P), to the east by State Highway 645 (River Road), to the south by a private residence, and to the west by the Appomattox River.

The RL site began as a drainage excavation and borrow pit on Fort Lee property in the late-1950s, but progressed north onto FCI-P property. The RL site was reportedly used as a trench and fill sanitary landfill. The Reformatory Road Landfill operated from about 1965 until October 1983 when it was taken out of service. The landfill received a variety of wastes during its operational history including municipal waste, carpeting, lawn and leaf debris, newspapers, wood, and food products from both Fort Lee and FCI-P.

Fluor Daniel Inc. was contracted to develop a RD to implement the recommendations of the FS. The RD was finalized by Fluor Daniel Inc. in October 2002.

The RA at the RL site was conducted by Shaw Environmental Services in three stages. The first stage was conducted from June 2003 to December 2003. This stage involved removing vegetation from the landfill boundaries, control of surface water runoff, moving of the access road to the water training facility, and the installation of a leachate collection system. The second phase was conducted from April 2004 through December 2004 and involved the installation of a liner system to control infiltration and a landfill gas venting system along with re-vegetation of the landfill cover. The third phase was conducted in May 2005. The third phase involved the installation of concrete pads around the gas vents, removal of the material laydown area and completion of the site drainage features.

An LTM program was developed for the RL site and includes the monitoring of groundwater Table 3.1 Column A constituents (9 VAC-20-81-250) for VOCs and metals. During the background reporting period, control charts for groundwater concentrations for each detected analyte were plotted graphically over time to track concentration trends. At the end of the background period, each constituent at each well was evaluated for outliers and statistical analysis methodology identified in VDEQ Solid Waste Management Regulations (9 VAC-20-81-250) and USEPA unified guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities (USEPA, 2009). Background threshold values (BTV) were calculated for each constituent from each well. The BTVs are used for evaluation of groundwater data during the LTM program. The latest round of groundwater sampling was performed in June 2015. Benzene, 1,2-dichloroethane, and Vinyl Chloride were detected, albeit at low levels.

Note: Site CCFTLE-33 is now used to track the five-Year review costs for the following sites (FTLE-05, -06, -11, -15, -16, -17, -19, -24, -13, and CCFTLE-33)

Site ID: CCFTLE-33
Site Name: Reformatory Road LF
Alias: RL Site

CLEANUP/EXIT STRATEGY

Continue LTM as required and pursue opportunities to reduce the scope and frequency of groundwater monitoring.

Site ID: CCFTLE-34
Site Name: Former Golf Course Maintenance Bldg
Alias: GCMB Site

STATUS

Regulatory Driver: CERCLA

Contaminants of Concern: Herbicides, Pesticides, Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	201004.....	201011
SI.....	201102.....	201401
RI/FS.....	201502.....	201710
RA(C).....	201502.....	201710

RIP Date: N/A

RC Date: 201712

SITE DESCRIPTION

The Former Golf Course Maintenance Building (GCMB) site is located in a wooded area northeast of the intersection of Sisisky Boulevard and Adams Avenue. The installation's golf course lies to the east of the site and a closed small arms range (known as the 1000-inch small bore machine gun range) lies to the west of the site. The GCMB site was recently discovered during the field activities for a MMRP RI of the 1000-inch small bore machine gun range.

The site contains a building pad with various utilities (including an active water service), debris piles, remnants of drums, an abandoned pole-mounted transformer case, and evidence of UST locations. Anecdotal accounts from Fort Lee staff indicate that this was the former location of a maintenance building associated with the adjacent golf course. The building caught fire during the 1970s, and the remains were subsequently abandoned. Installation staff indicated that at the time of the fire, the building was being used to store pesticides and herbicides for use at the golf course and was an equipment repair area. The site is immediately upgradient of wetlands and ecologically sensitive drainage features.

As noted above, a former range is located adjacent to the GCMB site. This range was initially determined to be a small arms range; however, the findings associated with recent investigations indicated UXO items (i.e., bazooka rockets) within 100 to 200 feet of the GCMB site, some of which have been recently detonated. As such, while UXO items are not anticipated to be present on the GCMB site, given the proximity of the bazooka rounds, UXO avoidance protocols were implemented during field activities. An SI was completed in 2013 and recommended that the USTs be removed and that an RI be performed. A contract for an RI and removal of the USTs was awarded in September 2015 and is underway. There may be additional costs which extend beyond 2015; however, until the RI is completed there is not enough information to prepare and justify a cost estimate for any additional work at the site. Any additional cost estimates, if required, will be delayed until the RI has been completed. Until then, this remains a zero cost site.

CLEANUP/EXIT STRATEGY

Remove USTs as appropriate. Complete the RI and determine the nature and extent of soil and groundwater contamination.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
There are no NFA sites			

CR Schedule

Date of CR Inception: 199104

Past Phase Completion Milestones

1992

RFA (CCFTLE-33 - Reformatory Road LF)

2005

CMI(C) (CCFTLE-33 - Reformatory Road LF)

2011

PA (CCFTLE-34 - Former Golf Course Maintenance Bldg)

2014

SI (CCFTLE-34 - Former Golf Course Maintenance Bldg)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date: 201710

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of CR at Installation (including LTM phase): 204312

FORT LEE CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
CCFTLE-33	Reformatory Road LF	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
CCFTLE-34	Former Golf Course Maintenance Bldg	RI/FS						
		RA(C)						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201212

Restoration Advisory Board (RAB): No

Reason Not Established: The community has expressed no sufficient, sustained interest in a RAB.

Community Interest Solicited on: 201410

Efforts Taken to Determine Interest

Under the auspices of the Fort Lee Public Affairs Office, the local community was surveyed in October 2014 for potential interest in establishing a RAB.

Results

The Fort Lee Public Affairs Office determined that there was not enough community interest to establish and sustain a RAB at the time.

Follow-up Procedures

A follow-on survey is scheduled for 2016.

Additional Community Involvement Information

The IRP program at Fort Lee operates under the guidelines established by the Fort Lee community relations plan. Implementation and maintenance of the plan is the responsibility of the Fort Lee Public Affairs Office.

Administrative Record is located at

Fort Lee Environmental Management Office
825 Shop Road
Fort Lee, VA 23801
Tel. (804) 734-5068

Information Repository is located at

Appomattox Regional Library
209 East Cawson Street
Hopewell, VA 23860
Tel. (804) 458-0110

Current Technical Assistance for Public Participation (TAPP):N/A

TAPP Title: N/A

Potential TAPP: N/A

